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(21) International Application Number: PCT/GB99/03026 (22) International Filing Date: 13 September 1999 (13.09.99) (30) Priority Data: 9819817.9 12 September 1998 (12.09.98) GB (71) Applicant (for all designated States except US): THE SECRETARY OF STATE FOR DEFENCE DEFENCE EVALUATION AND RESEARCH AGENCY [GB/GB]; Farnborough, Hampshire GU14 0LX (GB). (72) Inventor; and (75) Inventor/Applicant (for US only): MCNIE, Mark, Edward [GB/GB]; DERA Malvern, St. Andrews Road, Malvern, Worcestershire WR14 3PS (GB). (74) Agent: LAWRENCE, John; Barker Brettell, 138 Hagley Road, Edgbaston, Birmingham B16 9PW (GB).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>

(54) Title: FORMATION OF A BRIDGE IN A MICRO-DEVICE**(57) Abstract**

A method of micro-machining comprising providing a primary region of at least a first material (AA, BB, 56) which contacts a second material (8, 50, 52, 60, 62) at at least one end portion thereof, the method comprising providing an infill material (34, 36, 38) on to the second material, patterning and etching said infill material to form a hole (40, 42) through the infill material to the second material, depositing the first material on to said infill material so that the at least one portion of the first material contacts the second material through the hole. The method can be used to provide a track bridging suspended portions of micro-machined structures, for example the portion referenced (24). Also, a method of narrowing and sealing top portions of channels cut into a wafer is disclosed.

